

Abstract of the Disclosure

The present invention relates to a radar measuring device which, with a simple design, ensures reliable distance determination even when a mixed signal is zero, and a method for operating a radar measuring device. The radar measuring device includes:

A high-frequency oscillator (11) which emits two different carrier frequency signals (F1, F2),

A first switching device (14) for switching the carrier frequency signals (F1, F2) as a function of first pulse signals (P1) and emitting radar pulse signals (T1, 2),

A transmission antenna (16) and a receiving antenna (18),

A second switching device (24) for switching the carrier frequency signals as a function of a delayed second pulse signal (P2) and emitting delayed radar pulse signals (S1, 2),

A mixing device (21) for mixing received radar signals (R1, 2) with the delayed radar pulse signals (S1, 2) and emitting mixed signals (M1, 2).

The phase differences between the received radar signals (R1, 2) and delayed radar pulse signals (S1, 2) differ by a predetermined value when the two carrier frequency signals (F1, 2) are emitted. An amplitude signal is subsequently determined from the first and second mixed signal (M1, 2).

Figure

